THE VETERINARY RECORD

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AND AFTER.

We reprint this week portions of a paper presented at a Sessional meeting of the Royal Sanitary Institute, on one aspect of the supply of flesh food under present conditions and during the next few years. The question of standard of purity is obviously one which is referred primarily to Medical Officers of Health, but some phases of the subject concern veterinary surgeons more or less directly. Sterilisation of condemned meat has not, we believe, been considered by veterinary surgeons in this country, but in France, in some communes, if not in all, this is under the control of the veterinary inspector. As pointed out in the paper, the establishment of that practice in this country would materially affect the work of the inspectors.

In the course of a discussion, Dr. W. J. Howarth, of the City of London, said :—

"he considered that farmers could do more in saving carcases than meat inspectors if they remembered that pig tuberculosis was mainly ingestion tuberculosis, and that the infection was generally received as a result of feeding on (*a*) tuberculous cows' milk or residual products, (*b*) the refuse on midden steads contaminated with the excreta of infected cattle and poultry, and (*c*) the infected offal of slaughtered animals."

Twenty years ago this subject would scarcely have found place in the pages of a veterinary journal: to-day, in this country there are many of our members holding appointments under municipal bodies, and their number steadily increases: whilst in our overseas Dominions there are others who are administering duties of wider scope than falls to the lot of those at home—to mention two of the more prominent of these, Col. Irvine Smith, who has created the modern stock markets at Johannesburg, and Mr. A. Blake, who has evolved and controls several large departments under the municipality of Rangoon. There can be little doubt that in this direction there will be further opening for the skill and capacity of veterinary surgeons in the future, though it is more than possible that progress in the next few years may be retarded by the economic effects of the present war.

Again, there are some of us who look forward to State aid for the profession, such as has been given for many years by Continental governments, and is given in some of our Dominions. With such aid must inevitably come the requirement of a wider range of veterinary work—not the narrowed field of the specialist, of which it may well be said that a little leaven leaveneth the whole.

FRACTURE OF THE NAVICULAR BONE—RECOVERY.

Prof. G. Ranzani has recorded the case of fracture the navicular bone following the penetration of a picked-up nail, which had the rather rare result of complete recovery (*Il Nuovo Ercolani*, 1913).

Before the author saw the horse in question, the owner had been treating it with an emollient poultice, in the hope of thus curing it in a few days. This treatment proving of no avail, the horse was brought to the clinique of the Veterinary School at Pisa, where the operation for picked-up nail was performed.

The fistulous tract was opened up, and it was found that the nail had penetrated the aponeurotic extension of the flexor perforans, a few centimetres from its insertion. An exploration through the open orifice, across the inferior sesamoidean sheath, revealed that the navicular bone was rugose and mobile. By enlarging the opening it was found that the bone was fractured at its internal extremity which was completely separated from the principal portion.

A counter-opening was made; and a drainage tube was applied to facilitate the exit of pus and synovia. The tract was then copiously irrigated with an antiseptic solution and powdered with iodoform, and a slightly compressive bandage was applied.

After the operation, the fever of reaction was rather intense. There was abundant suppuration and local swelling; and the horse constantly held the foot up and refused food. On account of the intense pain and the abundant discharge of purulent synovia, sublimated compresses were continuously applied in the following days, while every morning an abundant irrigation with an 8% carbolic solution was carried out. In fifteen days the discharge ceased, and the wound presented healthy-looking granulations and a notable tendency to cicatrize. In two and a half months cicatrization was complete; and in three months, when the animal left the clinique, the horn was almost wholly reproduced. Four months after this the owner reported that the horse was completely cured and doing its ordinary work.—(*Revista de Higiene y Sanidad Veterinaria*).

THE ETIOLOGY OF EQUINE INFECTIOUS ANÆMIA.

Profs. Carré and Vallée have published an article upon this subject (*Receuil de Méd. Vét.*, 15 April, 1916). They have been investigating the disease for fourteen years, and the principal results of their researches are as follows :—

1. Pernicious anæmia of the horse is an infectious inoculable disease, due to a filtering ultra microscopic virus.

2. The blood and the urine of the patients are virulent.

3. The virus is destroyed by heating to 60° C. (= 140° F.).

4. Infection takes place especially by the digestive tract and by the medium of the urine.

5. Horses apparently cured remain infected, and spread the contagion to their surroundings.

These essential ideas have been confirmed—by Ostertag in Germany, by Marek in Hungary, by Francis and Marsteller in Texas, by Mack in Nevada, etc., and have recently been the object of investigation by a Japanese commission which, during four years of studies, experimented upon 980 horses.

On the other hand, K. R. Seyderhelm and R. Seyderhelm, in a work published in 1914, affirm that pernicious anæmia is not caused by an ultramicroscopic virus, but by a poison, *estrin*, contained in the œstridæ of the horse (*Gastrophilus equi* and especially *Gastrophilus hæmorrhoidalis*). They found this conclusion upon the fact that the injection of aqueous extracts of the aforesaid larvæ into the horse cause acute mortal accidents or chronic anæmic or febrile disturbances which run a progressive course.

Carré and Vallée admit the existence in the horse of verminous anæmias, gastrophilic or strongylic; but they refuse to admit the unicity of equine pernicious anæmia and the solely verminous etiology of this disease. They consider it proved, by their own researches and the numerous confirmations that they have received from all quarters, that *in the horse there exists an infectious anæmia of inoculable microbial nature, due to a filtering virus.*—(*Revista de Higiene y Sanidad Veterinaria*).

Rupture of the Heart in a Horse from a Fall.

Cases of rupture of the myocardium from diminished resistance of its wall by degenerations or by atrophy, or else in consequence of old-standing valvular defects, are relatively frequent. But the cases in which the rupture occurs when the cardiac muscle appears healthy to the naked eye are certainly worthy of attention. In these cases the rupture only occurs by the immediate intervention of some trauma (external wounds, falls to the ground, and, in cattle, wounds produced by some foreign body which has penetrated across the reticulum). T. Pagliardini and L. Fedeli have just recorded a case due to the second of these three causes.

The subject, a horse, was working on the railway on a very dark night in the war zone on the Italian front. He was suddenly struck by an enemy search-light, which was followed by the whizzing and bursting of a shell. The horse was frightened, plunged violently sideways, and fell from a bridge about five metres (= some sixteen feet) high. Death followed in a few minutes.

At the post-mortem examination, a slight sanguinolent discharge from the nostrils and excoriations in various parts of the body were noticed. The mucous membranes were very pale, almost wax-like, and the abdomen was very tympanitic.

When the thoracic and abdominal cavities were opened, nothing notable was found in the organs contained in them, except that the pericardial sac was enormously augmented in volume. When opened, a large quantity of partially coagulated blood escaped from it. The right ventricle was found to be torn completely through along its longitudinal axis, by a zig-zag wound. The ribs were perfectly sound, and the cranial cavity presented nothing noteworthy.

The almost instantaneous death was certainly due to the rupture of the right ventricle, which had probably burst in systole in the fall. The naked-eye examination discovered no signs of cardiac disease which might have diminished the resistance of the muscular wall.—(*La Clinica Veterinaria*).

VETERINARY EDUCATION IN THE UNIVERSITY OF MELBOURNE.

(Concluded from p. 109.)

THIRD YEAR.

With the commencement of the third year the student begins his school acquaintance with practical clinical work. The ground work of anatomy, physiology, materia medica, and the preliminary sciences has prepared the way for the study of disease processes and the direct observation and treatment of diseased conditions in the living animal.

The subjects of the year are :—Parasitology, part I ; Pathology and Bacteriology ; Veterinary Hygiene and Dietetics ; Pharmacology, Therapeutics and Toxicology.

As minor subjects there are also Principles of Shoeing and Zootechny ; and the student is required to attend the clinical practice and take a part in the dispensing and pharmacy work.

PATHOLOGY AND BACTERIOLOGY.

"The course will consist of lectures and demonstrations, including laboratory work, extending over not less chan 150 hours.

The lectures in *General Pathology* deal with :—

The Causes of Disease—general considerations ; classification of disease ; mechanical, physical, chemi cal, and parasitic causes of disease. Reactions to Injury—inflammation and local reactions ; regeneration and healing of wounds ; systematic reaction to infection ; fever ; necrosis ; death.

The degenerations and infiltrations.

Hypertrophy and atrophy.

Neoplasms ; cysts ; teratomata.

Special Pathology—The disease process affecting the various organs and systems of the body :—

Circulatory—the blood, heart, vessels, spleen, lymphatic system, and blood-forming organs.

Respiratory — nasal passages, larynx, trachea, bronchi, lungs and pleura.

Digestive—mouth, œsophagus, stomach, intestines, liver, pancreas, peritoneum.

Urinary—kidneys and ureters, bladder, urethra.

Reproductive—male generative organs, female generative organs, mammary glands.

Osseous—bones, joints, cartilages.

Muscular—the skeletal muscles.

Nervous—brain, spinal cord, peripheral nerves.

The eye. The Ductless Glands. The Skin.

Bacteriology—

The classification, morphology, isolation and cultivation of bacteria. Filtrable viruses.

Protozoan parasites.

Immunity.

Practical Work. This comprises the macroscopic examination of diseased tissues and organs; *post-mortem* examinations; the study of museum specimens; the preparation of sections of tissues exhibiting the various pathological conditions and their microscopic study

The examination of type cultures of bacteria; methods of staining; cultivation and identification of common organisms.

As compared with this course of 150 hours, the Royal College of Veterinary Surgeons Bye-laws prescribe.

"(*a*) *Pathology.* A course of not less than 80 lectures on the morbid anatomy and pathology (including bacteriology and protozoology) of the domesticated animals.

(*b*) *Practical Pathology.* A practical course extending to not less than 40 hours instruction."

i.e., a total of 120 hours.

The R.C.V.S. examination test is Pathology, Bacteriology and Protozoology (written 2 hours, oral 15 minutes). No practical examination is held.

As against this the Melbourne University examination consists of: Written paper 3 hours, Practical Examination 3 hours, in the course of which there is a *viva voce* on museum specimens 15 minutes.

The standard of the practical examination can be judged with some accuracy from the paper set in 1914.

PATHOLOGY AND BACTERIOLOGY.

Practical Examination.

Third Year. 1914.

1. Identify, and give a short account of the pathological changes manifested in the sections marked 1 to 6.

Key. 1. Congestion and Hæmorrhage, liver. 2. Carcinoma. 3. Enteritis, acute. 4. Parenchymatous Nephritis. 5. Biliary Cirrhosis. 6. Bronchopneumonia.

2. Identify, and give a short description of the cultures A, B, and C, making such preparations as are necessary.

Key. A. Bac. subtilis. B. Sarcina lutea. C. Streptyogenes.

What features of growth, likely to be of value in identification, are exhibited by bacteria in the cultures W, X, Y and Z.

Key. W. Durham tube, acid and gas. X. Litmus milk, acid and clot. Y. Pigment on agar. Z. Gelatine, liquefaction.

(Note. All preparations to be handed in.)

At this point it must be explained that the third year course in Pathology and Bacteriology is really an introductory or general one, covering the whole range of veterinary pathology in a general way. It is supplemented by a course on "Pathology and Bacteriology of Infectious Diseases of the Domesticated Animals" in the fourth year.

A similar explanation may be offered for the splitting of the subject of Parasitology into two parts. In the the third year the student takes up:—

Parasitology, Part I.

"The full course in Parasitology will comprise work in two years. The first part will consist of lectures, demonstrations, and practical work extending over not less than 45 hours, and will deal with the following subject matter:—

Parasitism in general: definitions, types and degrees of parasitism, propagation of parasites, predisposing conditions, influence of parasitism on the host, and on the parasite, prophylaxis treatment, interrela- of man and domesticated animals as regards their parasites.

Directions for collection, preservation and examination of parasites.

Systematic study of the parasites of domestic animals. General account of the chief distinguishing features of each of the following groups, with brief descriptions of the more important points in the structure, and the life-history of the more common and important genera of each:—Trematoda, Cestoda, Nematoda, Acanthocephala, Gordiacea, and Hirudinea.

Books for Reference—

Parasitologia des animaux domestiques, by Neveu-Lemaire.

Practical Parasitology, by Braun and Lühe."

VETERINARY HYGIENE AND DIETETICS.

The syllabus is similar to that required by the R.C.V.S. but the time given to the subject is somewhat longer—50 hours in Melbourne as against 40 hours in the United Kingdom.

PHARMACOLOGY, THERAPEUTICS AND TOXICOLOGY

may be taken together, the first taking one term, whilst the two latter extend over two terms. Details are as follows:—

Pharmacology.

"The course, extendiag over not less than one term, will consist of lectures accompanied by lecture-demonstrations.

The action of the following groups of drugs is dealt with:—

Drugs acting on the Alimentary Canal; Aæsthetics; hypnotics and Sedatives; Local Anæsthetics, Nerve Stimulants; Drugs acting on the Heart, Respiratory, and Renal Systems; Drugs acting on the Circulation; Antiseptics; etc.

Therapeutics and Toxicology.

This course will consist of lectures dealing with the general rules of treatment, general and special methods of treatment in different types of diseases. Drugs, their mode of action, methods of administration and uses. Suitable Housing. Exercise and Diet for sick animals. Poisons, their classification, effects, antidotes and antidotal treatment."

As previously explained, Materia Medica and Pharmacy is taught in the second year course, but students usually elect to take the examination along with Pharmacology, in the third year, and a sample examination paper (3 hours) is here included:—

MATERIA MEDICA AND PHARMACY.

Veterinary Course.

The Board of Examiners.

A.—Materia Medica.

1. Name the compounds of Mercury which are commonly used in Veterinary Medicine. Briefly describe their appearance.
2. Give the general nature, composition, more important chemical and physical characters of, and name the pharmacopœial preparations derived from Calx, Asafetida, Rhei, Rhizoma, Opium, Filix Mas, Acidum Carbolicum, Zincum.
3. Write prescriptions—
   In the Imperial system for—
   (*a*) Expectorant mixture for a dog.
   (*b*) A stimulating liniment.

In the Metric system for—
(*c*) Mange dressing for a dog.
(*d*) Six tonic balls for a horse.
Give full directions as to the method of administration or application of the above remedies.
4. What is meant by imcompatibility? Give examples.

B.—PHARMACOLOGY.

1. Give a list of the drugs which produce vomiting in the dog, and state how they each act.
2. What classes of drugs will produce constriction of the arterioles if applied locally?
3. Contrast Mercuric Chloride and Carbolic Acid as disinfectants.

THERAPEUTICS AND TOXICOLOGY are the subjects of *a further* three hours examination paper.

The R.C.V.S. requirements for these subjects are :—(*a*) for Materia Medica and Toxicology—a course of not less than 40 lectures, (*b*) for Pharmacy and Pharmacology—a practical course extending to not less than 20 hours instruction.

(It would be very interesting to know what proportion of this 20 hours is allotted to practical instruction in *Pharmacology* in the affiliated schools. This subject can only be demonstrated in a physiological laboratory on the living subject. Is this ever done in the United Kingdom?)

Therapeutics as a separate subject is not mentioned in the syllabus as laid down by the R.C.V.S.

GENERAL ZOOTECHNY AND THE PRINCIPLES AND PRACTICE OF SHOEING.

"*Zootechny.* Principles of breeding—points of the horse, history of different breeds, with chief points; breeds of cattle, different types of cattle for special purposes.

Shoeing. Resumé of structure and functions of the foot. Preparation of the foot for a shoe. Different types of shoes for special purposes. Fitting and nailing on of the shoe. Defective action and its management. Injuries from shoeing. Bad feet. Leather and rubber pads.

These subjects are dealt by series of special lecture demonstrations during both the second and third years, and extending over not less than 50 hours.

Students must obtain a certificate of efficiency in these subjects before being allowed to proceed to the work of the fourth year."

Lastly, the third year student is made to assist the Senior men in the clinic, to dispense the medicines used therein, and to keep up the ordinary supply of stock medicines and dressings in the School pharmacy.

"CLINICS—Students must attend not less than 100 hours at the hospital practice, paying particular attention to the preparation, dispensing and administration of medicines."

FOURTH YEAR.

The fourth year work is the culmination of the course. The previous years have been leading up to and preparing the student for this—the practice of veterinary surgery and medicine (curative and preventive) and for meat inspection.

The subjects are Pathology (*vide supra*), Meat Inspection; Surgery; Medicine; Obstetrics; Parasitology Part II; and State Veterinary Sanitary Science.

PATHOLOGY AND BACTERIOLOGY OF INFECTIOUS DISEASES OF THE DOMESTICATED ANIMALS.

"The course will consist of lectures and demonstrations with laboratory work, extending over not less than 100 hours, on the various pathogenic bacteria, filtrable viruses, fungi and micro-parasites affecting the domesticated animals; the pathology of the specific and contagious diseases, including tropical diseases; and the practical application of the principles of immunity, including serumtherapy and vaccination.

In the Practical Work the student has opportunities for the practical study of the morphology and biology of the more important micro-organisms, including those associated with :—Anthrax, malignant œdema, black-quarter, braxy, tetanus, tuberculosis, glanders, caseous lymphadenitis, actinomycosis, botriomycosis, dermatomycosis, Johne's disease, contagious abortion of cattle, swine fever, swine erysipelas, fowl cholera, hæmorrhagic septicæmia, strangles, mastitis, and suppuration.

MEAT INSPECTION.

The course consists of lectures and demonstrations. The lectures deal with the objects and methods of meat inspection; the construction and types of abattoirs; the law relating to the preparation and sale of meat; and the application of the teachings of veterinary pathology and bacteriology to the special purposes of meat inspection.

The demonstrations are conducted weekly at the City Abattoirs to students of both third and fourth years."

In *Pathology and Meat Inspection* the examination test is on the following lines :—(*a*) Written paper 3 hours, (*b*) Practical examination 3 hours, (*c*) Meat Inspection examination *at the Melbourne City Abattoirs.*

As primary importance should, in the opinion of the writer, be attached to practical work as against merely theoretical book work, the practical examination paper set in December, 1914, is given.

PATHOLOGY AND BACTERIOLOGY.

PRACTICAL EXAMINATION.

FOURTH YEAR. 1914.

1. Make preparations from and diagnose the pathological condition present in the specimen of milk marked M.

Key. M. tuberculosis.

2. Identify, and give a short account of the cultures A, B, C, and D, as regards morphological and cultural characters.

Key. A, Bac. of Swine Erysipelas. B, B. abortus. C, B. tuberculosis. D, Bac. of Braxy.

3. Identify, and briefly describe the pathological conditions occurring in the slides marked 1 to 5.

Key. 1. Tuberculosis, mammary gland. 2. Anthrax, lung. 3. Hæmorrhagic septicæmia, blood. 4. Contagious Pleuro-pnemonia, bovine. 5. Catarrhal mastitis, streptococcic.

4. Make preparations from and give an account of the bacteriological examination of the specimen marked X.

Key. Actinomycosis abscess.

As before stated, no practical work in Pathology and Bacteriology is required in the examination by the R.C.V.S.

VETERINARY SURGERY.

This course consists of not less than 90 lectures and demonstrations on the principles of General Surgery and Regional Surgery.

Surgical diagnosis. Methods of restraint and handling.
Sterilisation of hands, skin, instruments, dressings and sutures.
Antiseptics, antisepsis, and asepsis.
Disinfection and disinfectants.
Anæsthesia. General and local. Anæsthetics. Methods of administration.
Sepsis, septicæmia, pyæmia and sapræmia.
Treatment of abscess and ulcer. Wounds and injuries.
Surgical diseases of bones and joints. Injuries. Periostitis, osteitis, and arthritis.
Fractures and dislocations. Tumours of bone. Special fractures.

Surgery of muscle and tendons. Strain and rupture; dislocation of tendons.
Knuckling over; tenotomy.
Surgery of the abdomen. Injuries to the abdominal wall, and deep structures.
Surgical condition of the mouth and pharynx; teeth; œsophagus; stomach and intestines. Obstruction, strangulation and intussusception. Tympanitis. Hernia
Surgery of the respiratory system. Catarrh of the nasal cavity and sinuses.
Trephining of the skull sinuses. Laryngitis; roaring. Tracheotomy. Puncture of the thorax. Broken wind.
Surgery of the urinogenital system. Injuries to the kidney. Calculus and abscess. Cystitis, vesical calculus, tumours of the bladder; atony of the bladder. Catheterisation of various animals. Examination of the bladder. Urethral calculus, retention of urine, incontinence of urine. Hæmaturia.
New growths of penis and vulva.
Surgery of the uterus and ovaries. Hysterectomy and oöphorectomy.
Castration; cryptorchidism and monorchidism. Inguinal hernia.
Surgical diseases of the nervous system. Symptoms of spinal lesions.
Paraplegia and hemiplegia. Facial paralysis, paralysis of the fifth nerve. Paralysis of the recurrent laryngeal nerve. Median and radial paralysis. Neurectomy.
Surgery of the foot. Laminitis, quittor, canker, grease, thrush, sandcrack. Pus in the foot. Picked up and buckled nail, corns.
Surgery of the eye, nose and ear. Injuries, conjunctivitis, cataract, glaucoma, staphyloma, otorrhœa, etc.

OPERATIVE SURGERY.

During this course, which is essentially practical, all the usual operations in Veterinary Surgery will be demonstrated, and opportunity will be afforded students to perform them on the dead subject.

VETERINARY MEDICINE.

Diagnosis of Disease. History. Present state.
General Examination. Attitude of patient, condition, conformation, temperament, condition of coat, visible mucous membranes, pulse, temperature, respiration.
Special Examination. Circulatory apparatus, respiratory, digestive, urinary, genital, nervous system. Examination of blood, urine, and body fluids. Diagnostic inoculations.
Sporadic Diseases. Diseases of the digestive organs, mouth, œsophagus, stomach and intestines; the liver; the peritonenm; the urinary apparatus, kidneys, bladder; the genital organs; the circulatory system, heart, pericardium, blood-vessels; the blood and blood-forming organs, spleen; the respiratory system, larynx, bronchi, lungs, pleura; the nervous system, brain, spinal cord, peripheral nerves; the skin.
Constitutional Diseases. Diabetes, gout, hæmoglobinuria.
Infective Diseases, including:—Septicæmia, Pyæmia, Anthrax, Malignant Oedema, Blackquarter, Braxy, Tetanus, Glanders, Tuberculosis, Johne's Disease, Contagious Abortion, Distemper, Rabies, Foot-and-Mouth Disease, Variolæ, Rinderpest, Swine Fever, Swine Erysipelas, Swine Plague, Fowl Cholera, Hemorrhagic Septicæmia, Septic Pneumonia in pigs and calves, Strangles, Influenza, Purpura Hæmorrhagica, Equine Pneumonia, Contagious Bovine Pleuropneumonia, Calf Diphtheria, Actinomycosis, Botriomycosis, Malignant Catarrh, Contagious Pustular Stomatitis, Infectious Vaginal Catarrh, Sheep Scab, Mange, Ringworm, Texas Fever, Piroplasmosis, Surra, Dourine.

OBSTETRICS.

Generative Organs of the Female—Oestrum, Fecundation, Sterility, Gestation, Signs of Pregnancy, Fœtal Coverings.
Diseases and Accidents of Pregnancy. Constipation, Oedema, Amaurosis, Albuminuria, Abortion, Premature Labour, Hernia, Rupture and Torsion of the Uterus.
Normal Parturition. Subsequent changes in the Maternal Organs.
Accidents and Diseases following Parturition. Retention of Fœtal Membranes, Post-partum Hæmorrhage. Invertion of the Uterus, Vagina and Bladder, Vaginitis, Wounds of the Genital Organs, Metritis, Metroperitonitis, Parturient Apoplexy, Post-partum Paralysis, Laminitis, Mammitis and Diseases of the Teats, Maternal and Fœtal Dystokia, Deformities, Tumours, Induration of the Os uteri, Hydrocephalus, Ascites, Anasarca, Emphysema, Monstrosities, Malpresentations of the Fœtus, Obstetrical Operations, Mechanical Aids, Embryotomy, etc.
Diseases of New-born Animals. Hæmorrhage from the Umbilicus, Pervious Urachus, Hernia, Joint Disease, Indigestion, Diarrhœa, Constipation, etc.
Demonstrations with Phantom and Obstetrical practice.

PARASITOLOGY, PART II.

"The second part of this course will consist of lectures, demonstrations and practical work extending over not less than 30 hours.

Systematic study of the Parasites of Domestic Animals (continued) dealing more especially with the Arthropoda inimical to domesticated animals. General account of the chief distinguishing features of each of the following groups, with descriptions of the more important points in the structure and life-history of the more common and important genera of each:—

Arachnida, especially Pentastomida and Acarina; and Hexapoda, especially Diptera, Siphonaptera, Hemiptera, Anoplura, Mallophaga.

A brief survey of the chief parasites found in special systems and organs of the body in different domestic animals.

Books for reference (additional)—

Entomology for Medical Officers, by Alcock.
Medical Entomology, by Patton and Cragg.

To indicate the standard required in this subject an examination paper of the combined written and practical examination for 1915 is appended.

PARISITOLOGY.—PART II.

VETERINARY COURSE. PASS.

The Board of Examiners.

Rough sketches *must* be given wherever possible.

1. Identify specimens A to K, classifying them as far as possible. State in outline their life history, effects on the host, economic importance. and treatment both curative and preventive.

Key. A, Demodectic skin. B, Argas persicus. C, Linguatule adult. D, Warbles. E, Hæmatopinus (pig). F, Tabanus. G, Mosquito. H, Sarcoptes. J, Chorioptes. K, Melophagus ovinus.

2. Give an account of the Arthropoda, of which stages may be met with in the respiratory and alimentary systems of horse, ox, sheep, dog,

3. Describe the essential features of structure and of life history of the carrier of Queensland "Redwater." How would you proceed in case of an outbreak of that disease?

4. Give a brief account of the Arthropods causing skin-disease in the horse.

The Royal College of Veterinary Surgeons syllabus makes no mention of Parasitology, but in practice this subject is included with Veterinary Medicine. The only practical work is the naked eye identification of a few specimens.

STATE VETERINARY SANITARY SCIENCE.

The course will consist of lectures chiefly explanatory of the leglislative enactments in the Commonwealth and States dealing with the control of animals in health and disease, including the following :—

Federal Quarantine Act 1908.

Stock Diseases Act 1890. Meat Supervision Act 1900. Milk and Dairy Supervision Act 1905. Chaff Adulteration Act 1908. Sheep Dipping Act.

Regulations and Administration—Over-sea quarantine (exotic diseases), Inter-State quarantine (Tick infestation, Pleuro-pneumonia, Anthrax, Swine Fever), Internal quarantine (contagious and infectious diseases).

The principles and practical application of quarantine and veterinary police measures as illustrated by the control of contagious diseases of animals in the United Kingdom and other countries will be dealt with.

No mention of this subject appears in the syllabus laid down by the Royal College.

CLINICS.

Students must attend for not less than 300 hours at the hospital practice of the Veterinary School.

Such is the curriculum, and such the tests applied at the formal annual examinations in the Melbourne University Veterinary School.

It is for the Royal College of Veterinary Surgeons to say whether graduates who have taken such a course and passed such examination tests to the satisfaction of an University with the status which Melbourne has, shall be eligible to be registered in accordance with the Veterinary Surgeon's Act 1881.

The waste of Flesh Food.

The following excerpts are from a paper on "Standard of Purity of Food Supply in War-time, and the Utilisation of Condemned Stores," by Mr. J. Wright Mason, M.B., C.M., D.P.H., M.R.C.S. (E.), Medical Officer of Health, City and Port of Hull, read at a recent sessional meeting of the Royal Sanitary Institute.

"One of the main causes of flesh food being destroyed is that it is affected with tuberculosis. The standard is fixed by the recommendations of the Royal Commission on Tuberculosis, 1898. Personally I think the standard should not be relaxed as far as beef carcases are concerned, but it is quite time definite instructions were given as to the reading of such recommendations. For example, an ox carcase with the forequarters and lungs affected with the disease, in one town removal of the diseased parts is read to mean the whole quarter, whilst in another town removal of the pleuræ with the offal concerned is considered to render the carcase safe.

In pig carcases the recommendations of the Royal Commission indicate total seizure in all cases of tuberculosis. This, I think, could be modified by putting the pig carcase on the same basis as the beef carcase, allowing the medical officer of health to use his discretion. I am sure that such a plan would save an enormous quantity of such foodstuffs, believing, as I do, that where a pig carcase is normal, with the exception of slight calcification of the lymphatic glands of the neck, condemnation of the head and neck is sufficient. From experience it will be found that the best and heaviest pigs are often those in which localised disease is present, and I may venture to express the opinion that the feeding up of the pig in such cases has rendered the disease latent."

"Under our present-day system we have a sharp line of demarcation as to whether meat is marketable or whether it should be destroyed. In using the word 'marketable,' most of you, I think, will agree that food inspectors do, apart from recognisable disease, work very greatly on the appearance of meat as it would be presented for sale, and many an old cow or store animal suffering from the result of accident has been condemned, although healthy, as 'unmarketable' simply because of the appearance it would have presented on exposure for sale. When such a sharp line as to what is saleable exists, it must be admitted that many individual cases are on the border line, and frequently the balance goes against the owner rather than the inspector should be laid open to criticism for passing such meat.

France, Italy, and Belgium have in their municipal meat market special stalls on which inferior meat is sold subject to supervision, and such a system is worthy of our consideration, in that it would admit for human food the flesh of animals which, although not in perfect health, must be regarded harmless according to sanitary and experimental data, and it would also broaden the boundary line between marketable meat and that which ought to be destroyed. In France, Italy, and Belgium it has been a universal experience that meat exposed on those special stalls finds a ready sale. Such a system would permit the legitimate utilisation of the meat of animals which are not in perfect health, and which meat is at the present time destroyed or sold for merely nominal prices sometimes to a questionable class of dealers. It would in this way also help the agriculturists by providing a place where the carcases of such animals could be sent to be properly inspected and dealt with."

"Owing to insufficient nutriment or during excessive organic functions, and in general during disturbed relations between ingestion and assimilation, domestic animals frequently exhibit that condition of nutrition which is characterised by the term 'poorness.' This condition appears in old age in consequence of a failure in the power of assimilation on the part of the organism. It is characterised by a scarcity of fat tissues, and by an increase in the consistency of the musculature, and its darker colour.

The meat of such animals is generally classed as unmarketable, and is usually condemned. This, however, is an error, for the meat of poorer animals contains more protein than the meat of fat animals, *e.g.*—

	Water.	Protein.	Fat.
Very fat ruminants	53·15	*16.75*	29·28
Poor ruminants	76·37	*20·71*	1·75

Its flavour as compared with that of fattened animals is, of course, less agreeable. It shrinks in cooking, becomes tough, acquires a dry taste, and is less palatable than fat meat; nevertheless there is no necessity to condemn such meat, though this is often done.

I would suggest the best way of utilising such carcases would be in the manufacture of sausages, by permitting the boning out of the carcase, for in the process of the manufacture of sausages the meat is minced up and mixed with fat, and so the meat in question is much improved as a food material. Remember also that I distinguish poorness from a purely physiological cause, from emaciation caused by disease.

Yellow carcases are often destroyed as jaundiced when the conditions are purely due to excess grass and cotton-cake diet, the point of difference being, of course, that only the fat is coloured an intense yellow, and not as in icterus, the entrails, muscles, and bones also."

Unnecessary Wasteful Condemnation.

"In connection with imported foodstuffs, owing to the delay in shipment, duration of voyage, etc., there has been a vast amount of damage done to such consignments. In Hull, since July last, more unsound foodstuffs have been dealt with in any two months than in the whole of the preceding year, and this state of things continues. An endeavour is being made by the Hull Corporation and Port Sanitary Authorities, however, to save all food materials possible. The Authorities give every facility for sorting out the good from the bad materials, and allowing the owners to realise what they can on the residue. Economy should be exercised, for eatables thrown away is like wasted ammunition."

"In my opinion, all cities should have, as in Hull, a properly controlled centre, where such materials could be turned over and sorted under the supervision of the medical officer of health, and a just decision be given regarding them. There has been no really satisfactory system adopted for dealing with condemned foodstuffs in the past; the tendency has been to get rid of them as best one may, either by (*a*) burning, which is inexcusable waste, (*b*) handing it over to the proprietors of some manure works or similar agency, generally for a nominal price, and by so doing enriching a private firm at the expense of the owners of the condemned material. Again, where possible, civic authorities should provide facilities for disposal of such material in a manner that by chemical treatment or by steam sterilisation under high pressure, they could obtain the maximum products which would be of value to the nation, and could be rated as part of its resources."

"I remember a meeting which I attended at the Local Government Board Offices, which was held to consider the question of imported foodstuffs under the provisions of the regulations of the Public Health (Foreign Meat and Unsound Food) Regulations, 1908. That meeting was largely attended by the medical officers of health concerned, and I am certain that the interview, together with the discussion which took place, has contributed very largely to the uniform and excellent manner in which the orders have been carried out. I would suggest that a similar meeting should be held to discuss the suggestions which I have no doubt will emanate from your discussion on the subject which I have ventured to deal with, and which, though certain to arouse criticism, has been an honest attempt to place the subject before you."

"In concluding my remarks, I have to acknowledge my indebtedness to Mr. J. MacPhail, M.R.C.V.S., Chief Foods Inspector in the City and Port of Hull, for his assistance in the preparation of this contribution, in giving me the benefit of his practical experience in carrying out his duties of food inspection."

[It must not be forgotten that the nutritive value of a food is not represented by its chemical contents—there are other factors which for want of knowledge may be grouped as "digestibility."

SUBSCRIPTIONS TO R.C.V.S.

The Secretary of the Royal College of Veterinary Surgeons begs to acknowledge the receipt of the following subscriptions for 1916 to the College funds:—

F. J. Ashley, Dalston, Cumberland	£1	1	0
Frederick Proctor, Manchester	1	1	0
H. C. Rockett, Lieut. A.V.C.	1	1	0
A. Smith, Lt.-Col. I.C.V.D,	1	1	0
Graham Williamson, Capt. A.V.C.	1	1	0
Previously acknowledged	762	1	6
	£767	6	6

Swine Fever—Fined.

At Tonbridge, Messrs. Noakes and May, Burrs Hill Farm, Brenchley, were summoned for having in their possession certain pigs diseased or suspected of swine fever, and failing to give notice with all practicable speed to the police, at Brenchley, on the 21st July.

Hedley Charles Davys Golledge, veterinary surgeon and Inspector for the Board of Agriculture, said he visited the farm on July 29, and had three pigs exhumed. He made a post-mortem examination of one, and found it to be infected with swine fever. Cross-examined, he said in the type of fever found on this farm there were no marked symptoms.

Oscar Stinson, veterinary surgeon, Marden, said there may be cases of pigs suffering from swine fever which even a veterinary surgeon could not detect without a post-mortem examination. Pigs over or wrongly fed frequently died. Shortness of breath might be a symptom of overfeeding. A layman would not, under these conditions, suspect swine fever. Farmers did not usually report when pigs showed the symptoms which the prosecution stated these had showed. He found no symptom of swine fever amongst the remainder of the pigs.

The Chairman, Mr. C. V. Powell, said, as a pig-breeder himself, although he did not wish to aspire with wisdom above his fellows, he would, after losing three pigs, have suspected something to be wrong and reported the facts. A fine of £4 4s. would be imposed.

The danger of Iodine Solutions in abdominal operations.

Mr. A. Ernest Maylard, B.S., M.B.LOND., F.R.F.P. and S.GLAS., writing to *The Brit: Med: Jour:* says:—

It has long been my custom to discard the use of iodine solutions for the sterilisation of the skin prior to an abdominal operation, although I have freely applied them after the peritoneal cavity has been efficiently closed. . . . .

Propping, in the *Zentralblatt für Chirurgie* (Nos. 19 and 26), proved by experiments on dogs that abundant fibrous agglutinations resulted from the injection of a solution made up of twenty drops of tincture of iodine in 80 c.cm. of salt solution into the peritoneal cavity. He further stated that he has seen six cases of ileus which he believed to be attributable to adhesions the result of iodine irritation. . . . . .

The possible evils of the use of iodine in abdominal work has recently received confirmation in a contribution to the *Annals of Surgery* (February, p. 198) by M. H. Walker and L. M. Ferguson, whose investigations were undertaken ostensibly for the purpose of determining what measures could be employed to prevent the formation of peritoneal adhesions. But, in their experiments upon rabbits, they first sought to produce adhesions, and found that "the densest aseptic adhesions were caused by touching the peritoneum lightly in five places with a small gauze pledget, dipped in half-strength tincture of iodine." One of the conclusions at which they arrived is, "iodine should be used in abdominal surgery with great care, or better, not used at all, for a very little of it allowed to touch the bowel causes masses of adhesions."

Hungarian Milk Sheep.

The milk sheep of the mountainous districts of Hungary is a small, picturesque animal, with long spiral horns and a coat of coarse wool. In weight it is seldom more than 65 lb, and its natural activity and hardiness enable it to withstand successfully the extreme rigours of the winters. The yearly production of milk is about two and a half times the live weight, and the wool about 2 lb per head. The composition of the milk is rich in fat, being in this respect nearly twice as rich as cow's milk.

OBITUARY.

S. J. YOUNG, M.R.C.V.S., Chelmsford.
Graduated, Lond: July, 1902.

The funeral took place at Preston Cemetery, of Mr. S. J. Young, M.R.C.V.S., aged 37, who died on Friday last after a brief illness.

Mr. Young, who was the fourth son of Mr. S. Young, Chelmsford, Essex, graduated in 1902, and practised in London. Three years ago he came to Preston as assistant to Major Porritt, M.R.C.V.S. When war broke out Major Porritt was called to his military duties with the Army Veterinary Corps, and his extensive practice in Preston and district fell upon Mr. Young's shoulders, including the duties of inspector to the Board of Agriculture at Fleetwood, and civil veterinary surgeon to the R.F.A. at Fleetwood Barracks.

Amongst those present at the funeral, in addition to the members of his family were Major Porritt, A.V.C., M.R.C.V.S., Preston, Mr. A. J. Bailey, F.R.C.V.S., Kirkham, Lieut. Evans and Lieut. Kitchin, representing Colonel Lane and officers of the R.F.A. Staff-Sergt. Spiller and members of the R.F.A. Sergeants' Mess. A large number of beautiful floral tributes were sent.

The late Mr. T. C. Toope.

Mr. E. Lyne Dixson, of Margate, President of the South Eastern Veterinary Association, writes:—

Mr. Toope died in harness, not only carrying out his own multitudinous duties of an extensive practice, but also, as far as he was able, acting for Mr. Crowther, of Deal, on the one side, and Mr. Golden, of Folkestone, on the other, during their temporary absence whilst doing duty with the military forces of the Crown.

No words of mine, I am sure, could possibly convey the deep esteem in which he was held, not only by the members of our Association, but by those veterinary surgeons who came in contact with him. A genial fellow, an ardent enthusiast in all that he undertook, a born organiser, and a strenuous worker, he will be greatly deplored and missed by all who had the pleasure of knowing him. He retired to rest on Wednesday night, 30th ult., at 11 p.m., was shortly after stricken with apoplexy, and within two hours had passed away.

I only learned of the occurrence on the evening of that day, and the funeral having been fixed for Saturday, had no time or opportunity to communicate with our members, many of whom, I am sure, would have wished to join me in attending the last sad rites.

Mr. Toope was born in 1857, at Sherborne, Dorset—a descendant of an old Huguenot family which settled there in the sixteenth century. He was educated at Sherborne School, and graduated M.R.C.V.S. in 1880, in the honours list, and gained the Spooner Gold Medal in addition to a silver medal as essayist and prizeman in 1879–80. For eighteen years he was Veterinary Inspector to the West Riding Magistracy and County Council and Board of Agriculture, as well as holding other appointments in the vicinity of Harrogate and Knaresborough, where he practised. He was President of the Yorkshire Veterinary Medical Society in 1891–92. Mr. Toope had been in practice as a veterinary surgeon at Dover for nearly twenty years, and had a practice throughout East Kent, which was greatly added to since the war began by his assisting to carry on the practices of colleagues who had joined the Forces. After coming to Dover he became Hon. Secretary and was one of the founders of the South Eastern Veterinary Association, and was Veterinary Inspector to the Borough of Dover. On the outbreak of the European war he was engaged night and day during the mobilization in his duties as Army Veterinary Inspector—an appointment he held till his death. He was an ardent amateur photographer, and was one of the members of the Dover Institute Photographic Society. He was a pioneer worker in photography in colours, and some years ago gave a lecture and demonstration on that process at the Dover Institute. He leaves a widow to mourn his loss, and also two sons and a daughter by his first wife.

"BOILED ALOES."

Dear Sir,—I have waited to see if anyone would pass any remarks in your last issue of Saturday's date with reference to Mr. Arthur New's article in *The Record* of Sept. 2nd.

According to Finlay Dun (11th Edition), in making a solution of aloes, the water should not exceed a temperature of 120° F. I take this to mean—if the water gets to boiling point the action of the aloes is destroyed.

Yours faithfully,
Aug. 11. "EMIGRANT."

[Other authors, in addition to Finlay Dun, give the direction quoted by our correspondent; but we think it will be found that not a few practitioners are in the habit of preparing aloes in water at a temperature a good deal above 120 F.—Ed.]

Lancashire V.M.A.

A MEETING will be held at the Grand Hotel, Aytoun Street, Manchester, on Thursday, Sept. 21st, at 6 p.m. Paper by Mr. G. H. Stent, "Notes on American Experiences and Treatment."
Tea at 5 p.m. G. H. LOCKE, Hon. Sec.

ARMY VETERINARY SERVICE

Extracts from *London Gazette*,

WAR OFFICE, WHITEHALL, Sept. 7.

REGULAR FORCES. ARMY VETERINARY CORPS.

Temp. Lieuts. to be temp. Capts.:—W. Harley (July 26) F. J. Pringle (Aug. 24).

Sept. 8.

Temp. Lieut. to be temp. Capt.:—C. Scott (Aug. 24).

Sept. 12.

Temp. Lts. to be temp. Capts;—J. C. Miller (Aug. 29): G. Whitehead (Aug. 31); G. H. Broad, W. B. Cronyn (Sept. 1); T. W. McMahon (Sept. 2); A. Hart, J. R. C. Andrews (Sept. 3).

Temp. Lieut. J. H. Crawford relinquishes his commn. on termination of engagement (Aug. 29).

To be temp. Lieuts:—H. W. Stevens, W. Cawthorn (Sept. 1).

TERRITORIAL FORCE. ARMY VETERINARY CORPS.

Sept. 11.

Capt. P. McIntyre is granted the temp. rank of Major while commanding a Veterinary Hospital (July 17).

Sept. 13.

Capt. (temp. Major) W. Awde relinquishes his temp. rank on altn. of posting (Aug. 31).

Lieut. to be Capt.:—R. H. Stephenson (June 23).

The following casualties are reported:—

WOUNDED (Shock—Shell)—Sgt. A. Martin, 207.
DIED—Pte. F. C. Fisher, 16621.

The A.V.C. Comforts Fund.

Dear Sir,—I have pleasure in forwarding further list of subscriptions received for the A.V.C. Comforts Fund. Owing to absence from home and "books," I regret that there has been such a long gap since last list published, June 24th, but I trust those who have sent in contributions will excuse the delay. I have great pleasure in acknowledging several most kind donations received from Officers Commanding Veterinary Hospitals and Mobile Sections, which in some instances include contributions also from N.C.Os. and men, who wish thereby to show their appreciation of the gifts received from the Comforts Fund, and express the hope that the "comforts" and the weekly parcels of papers may be continued. Illustrated papers, books, magazines, games, gramophone records, are greatly in request, and I will be very grateful if, as soon as possible, generous parcels of these can be sent to me for forwarding to the various hospitals for use in the recreation huts.

I append a few extracts from letters which I feel sure will interest and gratify those kind contributors who have provided these comforts through the Fund.

I also have very great pleasure in acknowledging the receipt, from Lt.-Col. A. F. Deacon, A.V.S., of cheque £42 14s., with the enclosed letter, and giving list of subscribers.

I should like to take this opportunity to again thank the Veterinary Officers of the British Remount Commission in Canada for their kind thought and generosity to the Comforts Fund for benefit of those on active service.—Yours truly,

ADELAIDE M. MOORE.

Strathyre, Parsifal Road,
Hampstead, N.W.

List to September 5th:

Mrs. Mosley,		£5	0	0
T. Salusbury Price (F)	3rd sub.	5	0	0
G. A. Oliver, Lt.-Col. A.V.C.		1	0	0
J. J. Townsend		1	1	0
Miss Whitaker			10	0
A. MacKenzie, Capt. A.V.C.		2	5	0
per Dr. Bradley: Students, R. (Dick) V.C.			5	0
G. Mayall and Miles Mayall			13	0
Harold Morphew		1	1	0
R. C. Matthews, Major A.V.C.		2	2	0
Mrs. G. Bolton		2	0	0
per Major Lake: No 7 Vety. Hosp., B.E.F.		10	0	0
per Major Burridge: No. 12 „	(280 fr.)	9	19	7
per Major Bartlett: No. 10 „	(100 fr.)	3	11	3
Mrs. Clibborn			10	0
Mrs. Abson		2	2	0
H. G. Allen, Major A.V.C. (India)		2	0	0
— Bamford, Capt.		1	1	0
per Maj. A. Porritt: Vet. Hl., W. Lancs. Div.		2	13	0
J. C. Gaunt, Capt. A.V.C.		1	0	0
J. J. Mills, Capt. A.V.C.		1	1	0
S. W. Marriott, Capt. A.V.C.		3	3	0
J. R. Ellison, Capt. A.V.C.		1	0	0
C. Davenport, Capt.		2	0	0
Mrs. W. D. Smith		2	0	0
J. J. Weir, Capt.		2	2	0
per Capt. J. Bell, Div. Vet. Hosl., Tun. Wells: proceeds of Gymkana		24	0	0
per Maj. H. E. Gibbs: No. 8 V. Hos., B.E.F.		5	0	0
J. Hogg, Capt. A.V.C.		2	2	0
James Taylor, Capt. A.V.C.		1	1	0
J. J. Keppell, Capt.		1	1	0

British Remount Commission,
501, Drummond Building,
Montreal, P.Q., 15 Aug., 1916.

My dear Mrs. Moore,

The Veterinary Surgeons of this Commission have subscribed $203.44 towards your A.V.C. Comforts Fund. I hope you will find the ready money useful. At the present rate of exchange $203.44 equals £42 14s., so I send you a draft for that amount, together with a list of subscribers.

With the very best wishes.—Yours sincerely,

A. F. DEACON.

Subscriptions.

F. W. Armstrong	10.00	J. D. Knowles	6.50
J. A. Armstrong	10.00	C. McEachran	10.00
J. Brown	10.00	— McQuire	5.00
J. C. Brown	10.00	A. E. Melhuish	5.25
J. F. Carson	7.50	J. W. Rider	5.00
A. F. Deacon, Lt.-Cl.	10.00	E. A. Ryan	6.69
F. B. Drage, Lt.-Col.	10.00	J. Spanton, Capt.	10.00
R. C. Duthie	5.00	P. R. Thompson	10.00
A. Gillespie	5.00	D. Warnock	10.00
P. A. Gough	10.00	E. C. Winter	10.00
J. Gregg	7.50	R. F. Wall	10.00
J. Hart	10.00		
T. M. C. Hunt	10.00		$203.44

Extracts from letters recently received.

From an A.V.C. Officer in Mesopotamia.

"Very many thanks indeed, on behalf of the Officers, N.C.Os. and men of the A.V.C. of this Division for the five splendid parcels which were received last week (cool vests and pants, tobacco, cigarettes, stationery, pipes, pouches, hussifs, handkerchiefs, books, etc.) The cheroots were shared by the officers, and the remainder of the things I distributed to Mobile V.S. and white personnel of Veterinary Hospital. All were delighted, and the men of the Mobile Section tell me that these are the first comforts they have received from anybody since they left England over a year ago."

"Many thanks for the papers, which have been arriving regularly each week. I can assure you that they are very acceptable, particularly during the last six weeks, as we have been in places where it has been impossible to obtain papers. I really think the men appreciate the papers more than anything."

"I hope it may be possible for you to continue to supply the papers—specially, as with the advent of winter the men will be confined to their mess, and papers, magazines and books are always much appreciated. I should like to say again how much we all value the gifts received from the Comforts Fund, and wish to thank yon and the other ladies who are helping you."

"The weekly parcels of papers are the greatest boon. I don't know what we should do without them, and each week their arrival is eagerly looked forward to."

"The weekly parcels of papers have arrived regularly and are always much appreciated by us all. They are the only papers we receive, except for an occasional newspaper that may come up with the rations. I don't think your choice could be improved upon."

"The papers are highly appreciated by myself and my men; often they have been an absolute godsend, we not having the chance of obtaining a paper."

"The papers arrive with the utmost regularity, and are very greatly appreciated. I only hope the funds are sufficient to enable you to continue to send them. They are always looked forward to and eagerly read by everybody in this section."

Anglo-Franco-Belgian Veterinary Relief Fund.

The following additional donation are reported :—

James Martin, Wellington, Salop	£2	2	0
Dr. Clement Stephenson, Newcastle-on-Tyne	10	10	0
Previously reported	217	16	3
Total	£230	8	3

Cruelty charge at Swindon—fined.

Harry Rich, a well-known cattle dealer, of Christian Malford, Wilts., appeared at Swindon to answer a charge of causing unnecessary suffering to a cow.

The prosecution was instituted by the R.S.P.C.A. The evidence showed that on August 10th a truck containing seven beasts was consigned on the G.W.R. to a man named Waltham, of Marden Lane, London. Early the following morning the attention of a goods porter was directed to the truck, and he found that a cow was on the floor, and another cow and a bull were standing on it. The cow could not get on to its feet, and it had to be lifted out of the truck into a pen. It had been tied up in the truck, but had broken the rope. The animal was in a weak and emaciated condition. Shortly afterwards it was shot. Defendant admitted to Inspector Nye, of the R.S.P.C.A., that he despatched the beasts to London, but maintained that they were all fit to travel.

Mr. J. C. Coleman, M.R.C.V.S., said he had the cow destroyed, and a post-mortem examination disclosed the fact that it was suffering from Johne's disease. The bones weighed 1 cwt. 1 qr. 4 lb., and the meat 1 cwt. 2 qr. 20 lb., whereas the proportion in an average beast should be one to five or six. The hide weighed 48 lb. The animal was not fit to travel, and this would have been obvious to any man of experience. Hundreds of beasts were sent away like this.

Answering one of the magistrates, witness said this class of beast was known in the trade as a "screw."

The Clerk: Was the flesh fit for human consumption?—No.

Defendant, giving evidence, said he thought the cow looked fit to travel, and he helped to load it. He was unaware that it was suffering from Johne's disease, with which he was unacquainted. Every animal was inspected by officers of the London County Council on its arrival. He denied that this would have been called a "wasting" beast; he had had hundreds of such animals passed by the London inspectors.—In cross-examination, defendant said the beasts were sent to London for his drover to do the best he could with them. The drover could get £5 or £50—whichever he could. He had sent several animals in this condition to London, as he thought they were fit to go.

The Clerk: Do you get more for them in London?—A good deal better; pounds more, if the inspectors pass them. If the inspectors don't, we get nothing.

It was stated that there were three previous convictions against defendant for cruelty to animals.

The presiding magistrate told defendant he seemed to be engaged in a somewhat reprehensible practice, entailing a certain amount of risk. If he was prepared to take risks he must be prepared to pay the penalty when he was found out. He would be fined £10 and £2 7s. costs.

DISEASES OF ANIMALS ACTS 1894 TO 1914, SUMMARY OF RETURNS.

Period.	Anthrax		Foot-and-Mouth Disease.		Glanders.†		Parasitic Mange. ‡		Sheep Scab.	Swine Fever.	
	Out-breaks (a)	Animals.	Out-breaks (a)	Animals.	Out-breaks (b)	Animals.	Out-breaks (b)	Animals.	(b)	Out-breaks (a)	Slaughtered. *
GR. BRITAIN. Week ended Sept. 9	7	7					17	29		62	55
Corresponding week in 1915 ...	9	10			1	2	8	25		39	97
Corresponding week in 1914 ...	13	14	2	6	3	8	4	4		78	732
Corresponding week in 1913 ...	3	4			1	1	19	38		30	268
Total for 37 weeks, 1916	386	456	1	24	36	89	1751	3914	185	3425	8716
Corresponding period in 1915 ...	433	494			38	68	‡605	‡1311	160	3093	13703
Corresponding period in 1914 ...	538	588	22	108	78	231	1526	2638	155	2960	30000
Corresponding period in 1913 ...	390	430			118	295	1959	3935	132	1790	23834

‡ The Parasitic Mange Order of 1911 was suspended from 6th August, 1914, to 27th March, 1915, inclusive.

(a) Confirmed. (b) Reported by Local Authorities. † Counties affected, animals attacked :— Excluding outbreaks in army horses.

Board of Agriculture and Fisheries, Sept. 12, 1916

IRELAND. Week ended **Sept. 2**	...	...	...	...	...	...	Outbreaks 4	14	6	21
Corresponding Week in 1915 ...	...	...	...	...	...	...	1	6	6	5
Corresponding Week in 1914 ...	...	...	...	...	...	...	2	2	1	6
Corresponding Week in 1913 ...	...	...	...	...	...	...	3	2	1	14
Total for 36 weeks, 1916 ...	3	7	...	...	...	...	52	292	230	1405
Corresponding period in 1915 ...	1	1	...	...	1	3	54	296	181	1005
Corresponding period in 1914 ...	1	1	76	957	...	...	64	392	159	825
Corresponding period in 1913 ...	...	...	...	...	...	...	101	376	113	689

Department of Agriculture and Technical Instruction for Ireland, (Veterinary Branch), Dublin, Sept. 4, 1916.

NOTE.—The figures for the Current Year are approximate only. * As diseased or Exposed to Infection